

merchandise to send back the dunnage (step 8). When Company A of the merchandise 10 receives the dunnage-returning notice, Company A sends back the dunnages to Company C of the manufacturer 30 so that the inventory of the dunnages at the Company C of the manufacturer 30 is at a desired level (step 9).

5 Company C of the merchandise 10 sends the dunnage inventory data from the merchandise terminal 11 to the server 20 via the computer network 100 (step 10). Then, the server 20 renews the inventory information database of the dunnage based on the received dunnage inventory data (step 11).

[0020] The server 20 sends the request to ship at least one product from the
10 server terminal 21 to Company C of the manufacturer 30 via the computer network 100 (step 12). Finally, Company C of the manufacturer 30 sends aluminum wheels as the products packed in the dunnages to Company A of the merchandise 10 (step 13).

[0021] The flow chart of the physical distribution system according to the
15 present invention shown in FIG. 3 illustrates only one preferred embodiment, and the present invention can be achieved, for example, by interchanging the steps 2- 6 (product inventory-processing block) with the steps 7-11 (dunnage inventory-processing block). The present invention can also be achieved by implementing the request to ship at least one product from the server 10 to the manufacturer 30
20 (step 12) and the shipment of the products from the manufacturer 30 to the merchandise 10 (step 13), for example, between the steps 1 and 2.

[0022] In the aforementioned embodiments, the system of the server 20 is not exemplified, but generally available server systems such as MMT Delivery Express System (Meiko Trans Co., Ltd.) may be preferably used.

25 **[0023]** As clearly shown in the above description, according to the present invention, the inventories of the returnable containers and the products can be effectively managed since the deficit of the products is calculated based on the inventory information about the products to alert the manufacturer to the product-shipping notice as well as the deficit of the returnable containers being calculated
30 based on the inventory information about the returnable containers in response to the request from the merchandise to ship the products.